SEZARY SYNDROM-CASE REPORT

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ABSTRACT

Sezary syndrome is a leukemic variant of pimary CTCL (cutaneous T cell lymphoma) manifested with clinical triade consisting of erythroderma, peripheral lymphadenopathy and atypical mononuclear cells(Sezary cells).[8]
We present a case of 45 years old female, with non-specific primary skin lesions which fastly progressed in erythrodermia. Skin biopsy, immunohistochemical investigations, biopsy from bone marrow and detectable Sezary cells>5% in periphery blood were inclusive for cutaneous limphoproliferative disease(Sezary syndrome). Lymph node punction showed atypical lymphocytes. RTG pulmo and ultrasound of abdomen without abnormalities. CHOP therapy was started.
We present a case with Sezary syndrome, clinically classified T4N2M0(stage IV A).
Keywords: primary cutaneous T cell lymphomas, Sezary syndrome, Sezary cells, CHOP therapy

INTRODUCTION

Se´zary syndrome (SS) was named after the French dermatologist, Albert Se´zary, who first described a patient with generalized erythroderma with monster cells (or now known as Se´zary/Lutzner cells) in the skin and blood in 1938. The term 'Se´zary' was first linked to the clinical presentation of SS in 1953 [1]. SS is a rare leukemic variant of cutaneous T-cell lymphomas (CTCLs) and comprises 3 -- 10% of CTCLs [2,3]. Historically, SS was defined as generalized erythroderma, lymphadenopathy and > 20% of atypical T-cells in the peripheral blood [4]. Patients with SS usually present with erythroderma, recently more specifically defined as confluent pink or red skin with or without scaling, involving at least 80% of the body surface area.With the advent of multicolor flow cytometry, it is now possible to quantitate SS cells more specifically using antibodies allowing the differentiation between erythrodermic mycosis fungoides (MF) and SS [5]. SS is defined as B2 blood involvement, which is defined as presence of a dominant T-cell clone plus one of the following: an absolute Se´zary cell count of 1000 cells/mm3 or higher, expanded CD3+ or CD4+ cells with a CD4/CD8 ratio of 10 or higher, or expanded CD4+ T cells with abnormal immunophenotype including loss of CD7 or CD26 [5,6]. A dominant T-cell clone is identified via polymerase chain reaction or Southern blotting, which would show a dominant T-cell receptor gene rearrangement in the blood [6]. The tumor-node-mestasis-blood staging system is used for both MF and SS with staging depending on skin stage, tumor, lymph nodes, blood involvement and visceral disease. In 2018, an updated version of World Health Organization–European Organization for Research and Treatment of Cancer (WHO-EORTC) consensus classification was published and the staging system was revised. SS is staged as IVA based on the revised staging guidelines in 2018 [7].

Therapy in SS should be based on stage of disease. The current consensus is that patients with early stage disease should receive skin directed therapies (topical chemotherapy - nitrogen mustard(mechlorethamine), carmustine (BCNU), Targretin(bexaroten), PUVA (photochemotherapy), radiotherapy and total body electron beam therapy). Systemic therapies (Immunotherapy, retinoids-Bexaroten, chemotherapy-CHOP, extracorporeal photopheresis, toxin therapy- Denileukin diftitox, fully humanized anti-CD4 antibody (Zanolimumab), histone deacetylase (HDAC) inhibitors) are reserved for those with early stage disease resistant to skin directed therapy or advanced disease. [9-14]

CASE PRESENTATION

We present a case of 45 years old female, dentist asistent, without anything special in personal and family history. She doesn't take any suspect medicaments, supplements and herbal products.

The problem appeared like pruritic erythema on photoexposed skin. She was treated from family dermatologist as photodermatosis. Dermatological examination showed diffuse erythema with 80% BSA (body surface area); and small area of healthy skin on the back (fig.1) and flexures (fig.2).

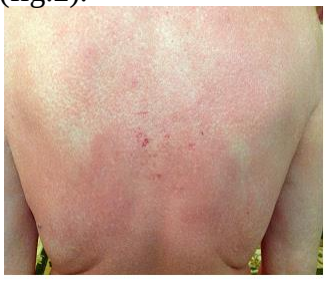

Fig.1

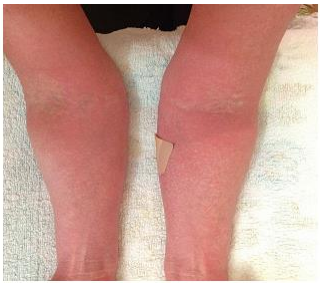

Fig.2

There were grouped small papules with lichenoid aspect on the trunk and face (fig.3). On the thigh papules were distributed follicular(fig.4). There was discreet pitiriasiform descvamation on some parts of the trunk and edema on the calf. Face, mucosa, nails and capilitium were not affected. There wasn't any sign of deffluvium also.

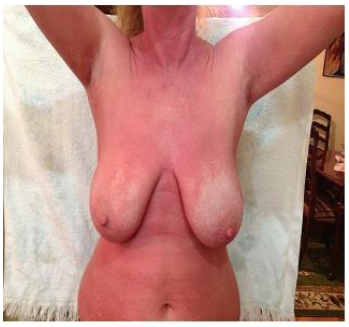

Fig.3

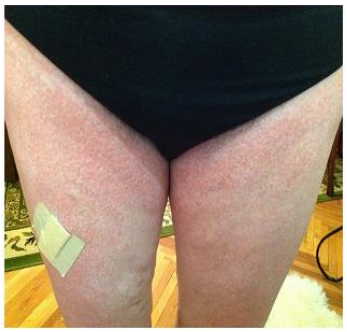

Fig.4

On admission there were no signs for organomegal only enlarged bilateral supraclavicular lymph nodes, mobile and without pain.

Clinical diagnosis: erythrodermic Lichen Ruber Planus and Pityriasis rubra pilaris.
Table 1 shows laboratory concessions, other parameters were in normal ranges

Table 1. Laboratory results (September) and last one before chemotherapy (December):

	September	December
Le 10 ³/mm³	8x10 ³/mm³	**13,1 x 10 ³/mm³**
Ly x10³/mm³	3,1x10³/mm³	**7,4x10³/mm³**
Cholesterol mmol/l	**6,68mmol/l**	**6,19mmol/l**
LDH U/L	203 U/L	**288U/L**

Skin biopsy was made from two specific skin changes (first from the calf- infiltrative erythema and second from forearm - lichenoid papule). Histological findings showed chronic inflammation(inclusive for erythrodermia and exclusive for lichen), because of the type and distribution of mononuclear infiltrate, absence of epidermotropisam, cutaneous limphoproliferative disease was suspected. Next step was imunohistochemistry made on Institute of pathology in Skopje and the results were: predomination of cell infiltrate with CD3(+), CD4(+), CD8(+), CD5(+), CD20 (-), CD30 (+), CD68(-), CD57(-). Biopsy from bone marrow made on University Clinic of chematology with non-specific signs, but in the periphery blood there were detectable Sezary cells >5%. Lymph node punction showed atypical lymphocytes. RTG pulmo and ultrasound of abdomen without abnormalities. CHOP therapy (Cyclophosphamide, Hydroxydaunorubicin or adriamycin, Oncovin-vincristine, Prednisone or prednisolone), was started in decembar. Until today there were conducted 5 therapy cycles with reduction of pruritus and regression of skin lesions. Adverse effects from chemotherapy nausea and vomitus.

DISCUSSION

The early lesions of CTCL mimic psoriasis, chronic eczema, atopic dermatitis, lichenoid pityriasis, pityriasis rubra pilaris. The differential diagnosis of SS includes other causes of erythroderma and non-SS leukemias with cutaneous involvement. Because the clinical features of erythroderma are often invariable regardless of cause and because the histopathology may not be specific, history and evaluation of the blood are often necessary to distinguish SS from the conditions discussed below.

In our case differential diagnosis were erythrodermic Lichen Ruber Planus and Pityriasis Rubra Pilaris. Classical adult onset Pityriasis Rubra Pilaris (PRP) is an uncommon cause of erythroderma; PRP may reveal palmoplantar keratoderma identical to SS but may be distinguished by history of preceding localized involvement and cephalocaudal progression.

Erythrodermic form of lichen ruber planus is very rare and in that cases there is always involvement of mucosa (oral or genital), which wasn't in our case.

Histology and immunohistochemistry were significant for diagnosis. Detectable Sezary cells>5% in periphery blood were of great value for making definitive diagnosis. According to staging guidelines made from ISCL and EORTC our patient was in stage IVA(T4N2M0). The current consensus for therapy based on staging proposed first line therapy for cases like that is chemotherapy and electron beam therapy. CHOP therapy was started and gives good results, with minor adverse effects.

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